

FACT SHEET FOR PERMIT NUMBER: OP12R1-015

DATE:

NDEQ ID: 00125

Program ID: AIR 001 00001

Permit Issued To: Dutton-Lainson Company

Name of Source in Application: Dutton-Lainson Company

Mailing Address: P.O. Box 729, Hastings, NE 68902-729

Source Location: 1601 W. 2nd St., Hastings, Adams County, Nebraska 68901

DESCRIPTION OF THE SOURCE OR ACTIVITY:

This operating permit OP12R1-015 approves the operation of a fabricated metal product manufacturing facility. Dutton-Lainson Company operates under the standard industrial classification (SIC) codes 3499 (Primary), 3469 (Secondary), and 3451 (Tertiary) – for fabricated metals production. Further description of the source is detailed in the table below:

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Relevant Standards
351-1	None	Zinc die cast machine, maximum capacity of 207 lb/hr zinc, installed in 1946.	None
351-2	None	0.5 MMBtu/hr natural gas zinc die cast process heater (integrated with die cast machine), installed in 1946.	NESHAP 40 CFR Part 63, Subpart A and DDDDD
355-1	None	Gas Metal Arc Welding in the Welding Department, controlled by indoor filter air cleaners above each welding area.	None
357-1	Freeboard Refrigeration Device, Reduced Room Draft, and a Freeboard Ratio of 1	Batch Vapor Degreaser, installed in 1980, and retrofitted in April 1998.	NESHAP 40 CFR 63 Subpart T; Title 129, Chapter 28, Section 001.05
357-2	None	0.4 MMBtu/hr natural gas fired degreaser boiler, installed in 1979	NESHAP 40 CFR Part 63, Subpart A and DDDDD
358-1	Dry Filter system with 98% control efficiency	Powder Paint Booth – automatic spray area; Booth contains a color module which filters and recycles overspray powder paint	None
358-2	Dry Filters with a 98% control efficiency	Powder Paint Booth – touch-up; and lacquer spray painting	None
358-3	None	0.7 MMBtu/hr natural gas burner on the powder paint cure oven, installed in 1961	None
358-4	None	Paint Burn Off Oven, with a 0.3 MMBtu/hr natural gas burner, equipped with an afterburner, installed in 1989	Title 129, Chapter 22
358-5	None	Dip Painting Operation – Water Based	None
359-1	None ^[1]	Zinc Electroplating Lines (rack and barrel process) – the chromic acid tank uses passivation (no electrical current) to apply chromium to part.	None

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Relevant Standards
363-1	None	Three (3) 0.36 MMBtu/hr natural gas exothermic atmosphere generators totaling 1.1 MMBtu/hr used to produce an oxygen-free environment within the electrically heated Brazer oven, installed in 1972	None
369-1	None	Gas Metal Arc Welding in the Jack Cell, controlled by indoor filter air cleaners above each welding area.	None
373-2	None	48 natural gas fired space heaters throughout the factory totaling 7.265 MMBtu/hr heat input	None
373-3	None	17 natural gas fired rooftop HVACs totaling 9.4 MMBtu/hr heat input	None
373-4	None	500 gal propane storage tank used for forklift refueling – annual use 3000 gal/yr average of LPG (Propane)	None
-	None	Maintenance of processing equipment, machinery, and/or control devices, buildings, grounds or facilities to maintain appearance or condition.	None

^[1] Emission Point ID# 359-1 has 4 high efficiency (99% control) wet scrubbers to control HCl and alkaline vapors. The facility is not claiming the control efficiency in emission calculations and the scrubbers are not required by any Title 129 regulations. Therefore, the scrubbers are not regulated by this permit.

Dutton-Lainson was originally constructed in 1926 (company established in 1886). Raw materials such as cold rolled steel, hot rolled steel, and zinc are used through a variety of processes such as brazing, degreasing, electroplating, zinc die casting, metal forming, welding, and painting. The finished products include oil cans, fence stretchers, winches, anchors, tongue jacks, and couplers.

The plant is classified as a major source as the potential to emit of trichloroethylene, a hazardous air pollutant (HAP), from the batch vapor degreaser is greater than 10 tons per year. All equipment in this permit is included in the source's annual air emission inventory report.

PERMIT HISTORY

June 13, 2002: No Permit Required for CP (CP app 02-0021)

December 13, 2002: Historical CP issued (CP02-0030) for bakeoff oven incinerator

January 1, 2003: Initial OP issued (OPSP0281)

July 16, 2003: OP modification (OPSPMOD-0006): The following change was made:

- Modified a condition in the permit to correctly identify when the source was required to submit a Part 2 application in accordance with EPA's requirements. The Part 2 application was regarding an application required in accordance with 112(j) of the Clean Air Act (MACT Hammer) for those emission units to be regulated under 40 CFR Part 63. The Part 2 application was required if the EPA failed to promulgate a standard prior to the date the Part 2 application was required. The language in the permit regarding the Part 2 application was not carried over to the renewal permit since the required submittal date for the Part 2 application has passed and the EPA has promulgated Part 63 standards for the source categories located at this facility.

April 26, 2008: OP renewal issued (OPSPR1-0026)

July 7, 2008: OP modification (administrative amendment) issued (OPSPMOD-0052): The following changes were made:

- Condition III(A) was amended to make the numbering scheme for Condition III(A)(3)(d), Condition III(A)(4), and Condition III(A)(5) consistent with the rest of the permit.
- References in Condition III(A)(3)(a)(i), Condition III(A)(3)(b)(ii)(1), and Condition III(A)(3)(b)(ii)(2) were changed to match the revised numbering scheme.
- Reference in Condition III(B)(2)(a) was changed so that it correctly references the testing requirements in Condition II.

COMPLIANCE HISTORY

The following is the compliance history for this facility for the last five years:

May 5, 2010: NDEQ Inspection – in compliance

January 11, 2012: NDEQ Inspection – in compliance

No violations of Operating Permit #OPSPR1-0026 and OPSPMOD-0052, issued on April 26, 2008 and July 22, 2008 respectively, have been identified. The last full compliance evaluation was completed on January 11, 2012.

TYPE AND QUANTITY OF AIR CONTAMINANT EMISSIONS ANTICIPATED:

The primary pollutants emitted from the emission units at Dutton-Lainson are oxides of nitrogen (NO_x), volatile organic compounds (VOCs), carbon monoxide (CO), sulfur oxides (SO_x), particulate matter (PM), particulate matter with an aerodynamic diameter less than or equal to 10 micrometers (PM₁₀), PM with aerodynamic diameter equal to or less than 2.5 microns (PM_{2.5}), hazardous air pollutants (HAPs), and greenhouse gases (GHGs).

Steel (in the form of coils, bars, and plates) and other raw materials enter the facility at the Receiving Department. These items are routed to the primary operations departments, which include: Automatics, Press, Die Cast, Progress Die, and Jack Cell. Operations performed in these departments include forming, shaping, cutting and milling. The only primary operation air emission point is the Zinc Die Cast Machine.

Zinc Die Cast Machine

In the zinc die cast machine (Unit #351-1), castings are made by a plunger injecting molten zinc from the melting pot into a mold. An integrated natural gas process heater (Unit #351-2) is used to melt the zinc. A vent is located above the machines to exhaust any particulate fumes. The potential particulate emissions from this unit were calculated using AP-42 emission factors and are relatively small (less than 0.5 tpy). See the potential emission calculations in the attached tables.

Parts are then sent either to the vapor degreaser for cleaning or to a secondary operation for additional work. Secondary (and tertiary) operations that are performed include: both hand and robotic welding, drilling, grinding, brazing, heat treating, bending and forming.

Gas Metal Arc Welding (GMAW) is conducted in the Welding department (Unit #355-1) and in the Jack Cell (Unit #369-1). Both robotic and hand welding are performed using ER70S-3 wire. There are indoor filtered air cleaners above each welding area. The average amount of weld wire consumed is less than 72,000 lbs. annually, dependent on production requirements. These emission units are considered insignificant activities, because brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAPs that exceed the reporting level(s) in Title 129, Appendix II or Appendix III.

Brazing operations consists of small slugs of copper wire are strategically placed in parts entering the brazer on a conveyor belt. The parts travel for 3 to 4½ hours through the oven. They are heated to 2050°F by electric heating elements in an oxygen free atmosphere and then cooled as they pass through the water jacket cooling chambers. The atmosphere inside the oven is controlled by a manifold system consisting of three ganged exothermic atmosphere generators (Unit #363-1). These three generators are natural gas fired. These emission units are considered insignificant activities, because brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAPs that exceed the reporting level(s) in Title 129, Appendix II or Appendix III.

Batch Vapor Degreaser

The batch vapor degreaser (Unit #357-1) uses a halogenated solvent (trichloroethylene) for cleaning parts. The cleaning solvent trichloroethylene (TCE) is heated to boiling (188°F) by steam from the gas-fired boiler (Unit #357-2). Parts in wire baskets are lowered into the TCE vapor by a hoist moving at less than 11 ft per minute and remain in the vapor until they reach the vapor temperature. They are then raised into the free board area and allowed to drip dry before being removed from the degreaser. The TCE vapor is restricted to the lower part of the degreaser by 2 sets of condensing coils and a water jacket in the degreaser. There is a powered working-mode cover over the degreaser that is kept closed except when moving a load in or out, which prevents air disturbances while the parts are being cleaned. Wing walls have been built around the degreaser to limit air drafts. Emissions from the batch vapor degreaser are TCE from the solvent vapors used to clean the metal parts. Since the batch vapor degreaser uses a solvent identified in 40 CFR Part 63 (Subpart T) – National Emission Standards for Halogenated Solvent Cleaning, it is subject to Subpart T. Potential emissions from the degreaser exceed 10 tons per year of TCE (a HAP) making the source a major source of HAPs. The emissions are calculated in the Fact Sheet Attachment.

Zinc Electroplating Operation (Unit #359-1)

There are two (2) electroplating lines consisting of a rack line for large parts and a barrel line for smaller parts. These two lines have the same processing steps:

- *1st Hydrochloric acid tank* – a 9% solution of HCl heated to 130°F for cleaning/etching;
- *Cascade rinse tank* – a 2-stage water rinse tank;
- *Alkaline tank* – a 50% solution of sodium hydroxide (NaOH), heated to 130°F to strip oils and smut;
- *Cascade rinse tank* – a 2-stage water rinse tank;
- *2nd Hydrochloric acid tank* – a 9% solution of HCl heated to 130°F for additional etching;
- *Cascade rinse tank* – a 2-stage water rinse tank;
- *Zinc chloride plating tank* – a zinc chloride solution with brighteners and wetters to enhance the process. Temperature, voltage and current are all adjusted to accommodate the various parts being processed.
- *Cascade rinse tank* – a 2-stage water rinse tank;
- *Chromate conversion tanks* – trivalent chromate conversion (passivation) at 1% to 5% solution with a pH of approximately 2.5. {no voltage or current in these tanks}
- *Cascade rinse tank* – a 2-stage water rinse tank;
- *Sealant tank* – a 5% sealant is heated to 130° which provides additional corrosion resistance for the parts
- *Rinse tank* – static rinse tank used only if required.

The entire line is serviced by ventilation hoods which are connected to 4 high efficiency wet scrubbers. Hydrochloric acid and alkaline vapors are removed from the air and are treated in the waste water equipment system. The potential emissions are calculated in the Fact Sheet Attachment.

Painting Operations

Spray painting is done in the automatic powder paint booth (Unit #358-1) which consists of a self-contained booth with of six (6) automatic electrostatic guns, a control panel, and color modules. The guns spray a polyester powder on metal parts as they travel through the booth. The powder is attracted electrostatically to the parts which are grounded through the hanging racks. Any excess spray is drawn into the color module (collection tank for a specific color of paint), filtered, and recycled. Particulate emissions for this booth come from over-sprayed powder that is drawn through the dry filter system with a 98 percent control efficiency.

The parts continue to travel on the conveyor through a touch-up hand powder paint spray booth (Unit #358-2) which uses 98% efficient dry filters for the exhaust. Occasionally, the touch-up booth is used for spraying lacquer based paints on special parts. Currently, Dutton-Lainson uses one paint as a flame retardant for certain products exported to Canada. They use an aluminum color paint, which sprayed on a few winch drive shafts, because these critical parts cannot be plated due to risk of hydrogen embrittlement. They also use one lacquer solvent is used to thin the paints. Less than 50 gallons/year of lacquer paint and thinner is currently used. The conveyor continues through the paint cure oven (Unit #358-3) which uses natural gas to heat the powder painted parts to a temperature of 400° F to 500°F for 15 to 25 minutes, depending on line speed.

A dip painting operation (Unit #358-5) is used to coat fence tools with a water-based paint. Parts are dipped into a tank containing the water-based paint and then placed on a rack to air dry. The drying agent used in this paint formula is ethylene glycol monobutyl ether (EGBE). EGBE is not a HAP, but it is a VOC. The source provided information on the actual hourly paint and thinner usage rates along with their respective VOC content. This information was used to determine a conservative estimate of the dip painting operation's potential VOC emissions by assuming 8,760 hours of operation per year. See the potential emission calculations in the attached tables.

Completed parts are sent to various departments to be assembled and packaged before going to Shipping. Assembly takes place in the Winch, Jack Cell, and Miscellaneous departments. There are no emissions associated with any of these activities.

The emissions of the painting operations included PM, PM₁₀, PM_{2.5}, VOC and HAPs. The emissions can vary based on the amount of paint used, composition of the paint/thinner use, and application method used. The emissions are calculated in the Fact Sheet Attachment.

Paint Burn-Off Oven

The burn-off oven (Unit Number #358-4) is used to remove excess paint from the paint line parts hangers and occasional parts that need to be repainted. Hangers or parts are loaded into the oven and heated with the primary burner to 800°F for 2 to 4 hours to remove excess paint. An afterburner raises the temperature of the exhaust gas to 1400°F to complete the incineration of the paint smoke. The burn-off oven is designed such that the primary burner will not operate unless the afterburner is on. This ensures that the afterburner, which is used to control smoke from the exhaust, is operated any time the oven is operated. Occasionally, zinc plated parts are baked in the burn-off oven for 2 hours at 400°F to treat for hydrogen embrittlement.

The maximum hourly capacity of paint burned is 0.75 pounds per hour (based on maximum amount of paint on the hangers and parts created at this facility that can be processed in the burn-off oven), although the manufacture's general use rated capacity for the incinerator is 10 lb/hr. The higher manufacturer's general use rate was conservatively used in determining the facility's potential emissions. Because the paint burn-off oven is classified as an incinerator, it must comply with the particulate emission standard of 0.1 grains per dry standard cubic foot (gr/dscf) given in Title 129, Chapter 22, Section 002. The initial operating permit fact sheet for this source indicated that test results from a similar unit (Model 27A)

showed PM emissions were 0.0246 gr/dscf. As such, no emissions testing was required for this unit. In addition, the source must certify that each burn-off oven operator has read and understands the operating instructions for the unit. The potential PM₁₀, SO₂, and CO emissions for the paint burn-off oven were conservatively estimated using AP-42 emission factors for municipal waste combustors.

Process heaters/boilers

With the issuance of NESHAP Subpart DDDDD that applies to process heaters and boilers at major sources, the process heaters and boilers at this facility cannot be considered insignificant activities. The process heaters and boilers include:

- Unit #351-2: 0.5 MMBtu/hr natural gas process heater portion of the zinc die cast machine
- Unit #357-2: 0.4 MMBtu/hr natural gas fired degreaser boiler

Insignificant activities

All of the combustion units that are not process heaters/boilers are considered insignificant activities, according to the Department's 'Insignificant Activities' list since each unit has a heat input less than 10 million Btu per hour. Natural gas combustion causes emissions of PM/PM₁₀, NO_x, SO₂, CO, and VOCs. However, the potential emissions from the natural gas emission units at the source are relatively small. Potential emission calculations for these combustion units are in the attached tables. The potential emission calculations for the natural gas combustion units were estimated using EPA AP-42 emission factors for natural gas boilers.

Insignificant activities at the facility at the time of permit issuance include the following:

- Unit #355-1: Gas metal arc welding in the Welding Department
- Unit #358-3: Powder paint cure oven
- Unit #363-1: Three (3) 0.36 MMBtu/hr natural gas exothermic atmosphere generators totaling 1.1 MMBtu/hr used to produce an oxygen-free environment within the electrically heated Brazer oven, installed in 1972
- Unit #369-1: Gas metal arc welding in the Jack Cell
- Unit #373-2: 48 natural gas fired space heaters throughout the factory totaling 7.265 MMBtu/hr heat input
- Unit #373-3: 17 natural gas fired rooftop HVACs totaling 9.4 MMBtu/hr heat input
- Unit #373-4: 500 gallon propane storage tanks used for forklift refueling.

Note: Dutton-Lainson decommissioned the 3.6 MMBtu/hr natural gas fired main space heater identified as Unit 373-1, per letter from Dutton-Lainson to NDEQ dated January 9, 2009. This unit was oversized and too inefficient to continue to be used for building heating. This unit was replaced by 4 new 125,000 BTU/hr natural gas infrared space heaters (included in Unit 373-2).

The following table summarizes the potential and actual emissions:

Regulated Pollutant	Potential Emissions as limited by permit (tons/year)	Actual Emissions ^[1] (tons/year)
Particulate Matter (PM)	1.56	Not Reported
Particulate Matter less than or equal to 10 microns (PM ₁₀)	1.56	0.05
Particulate Matter less than or equal to 2.5 microns (PM _{2.5})	1.56	0
Sulfur Dioxide (SO ₂)	0.13	0

Regulated Pollutant	Potential Emissions as limited by permit (tons/year)	Actual Emissions^[1] (tons/year)
Oxides of Nitrogen (NO _x)	20.10	0.04
Carbon Monoxide (CO)	7.12	0
Volatile Organic Compounds (VOCs)	16.72	11.02
Greenhouse Gases (GHGs)		
Mass Basis (tons/yr)	10,101.14	1.56
Carbon Dioxide Equivalents (tons CO ₂ e/yr)	10,110.79	1.56
Hazardous Air Pollutants (HAPs)		
Hydrochloric Acid (CAS # 7647010)	2.14	0.03
Trichloroethylene (CAS # 79016)	15.51	10.63
All Other HAPs	0.43	0.05
Total HAPs	18.08	10.71

^[1]Actual Emissions are from 2013 air emissions inventory.

APPLICABLE REQUIREMENTS AND VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS:

Title 129, Chapter 5 – Operating Permit Program

As described in Title 129, Chapter 5, emission limits for a facility requesting a Class II operating permit must be less than 100 tons per year (tpy) of each listed pollutant, 10 tpy of any single hazardous air pollutant (HAP), and 25 tpy of all listed HAPs. If a facility has the potential to exceed any of these thresholds, then it can be classified as a Class I source, unless the facility agrees to limit the potential below the threshold values. This facility has the potential to emit over 10 tons per year (tpy) of a single HAP (trichloroethylene) and over 25 tpy of combined HAPs. As such, the permit renewal for this facility is a Class I operating permit.

Greenhouse gases are a regulated air pollutant under 40 CFR Part 70 and Title 129 for sources that have GHG emissions. The NDEQ is obligated to include any applicable requirements concerning GHGs if they exist (for example, a construction permit limit concerning GHGs). The NDEQ has determined that, at the time of permit issuance, no requirements pertaining to GHGs apply to Dutton-Lainson.

Title 129, Chapter 12 – Operating Permit Renewal and Expiration

On April 26, 2008, Dutton-Lainson was issued an operating permit. This operating permit expired April 26, 2013. Dutton-Lainson submitted a renewal OP application on May 4, 2012. Since Dutton-Lainson submitted a timely and complete OP application, they are subject to their April 2008 (with the July 2008 modifications) until the new OP is issued per Title 129, Chapter 12.

Title 129, Chapter 18 - New Source Performance Standards (NSPS)

There are no New Source Performance Standards (NSPS) under 40 CFR Part 60 that are applicable to this source. The following NSPS appear to be applicable but are not:

Subpart Dc – Small Industrial-Commercial-Institutional Steam Generating Units

The NSPS for Small Industrial-Commercial-Institutional Steam Generating Units, found at 40 CFR 60 Subpart Dc, adopted by reference at Title 129, Chapter 18, Section 001.52, only applies to steam

generating units with a heat input greater than 10 million British thermal units per hour (MMBtu/hr). None of the boilers at this facility have a heat input greater than 10 MMBtu/hr. Also, the installation date of all boilers at this facility predate the commence construction applicability date of Subpart Dc (June 9, 1989); therefore, the boilers are not subject to NSPS Dc.

Subpart DDDD – Emission Guidelines for Commercial and Industrial Solid Waste Incineration Units

The Emission Guidelines for Commercial and Industrial Solid Waste Incineration (CISWI) Units found at 40 CFR 60 Subpart DDDD, adopted by reference at Title 129, Chapter 18, Section 001.73, only applies to CISWI units that commenced construction on or before June 4, 2010. In the Federal Register issued March 21, 2011 (76 FR 15704), paint burn-off ovens were considered CISWI units subject to this rule. EPA issued the final action on the reconsideration on February 7, 2013 (78 FR 9112). This final action states that paint burn-off ovens are not considered an incinerator under this subpart (per §60.2875 definition for burn-off oven). Therefore, the paint burn-off oven is an incinerator but not a CISWI unit, therefore it is subject to Title 129, Chapter 22, but not subject to NSPS Subpart DDDD.

Title 129, Chapter 19 - Prevention of Significant Deterioration (PSD)

Based on potential emissions information provided in the permit application, this facility is not a major source with respect to Prevention of Significant Deterioration (PSD). This facility is not one of the source categories that have a PSD major source threshold of 100 tpy for any single PSD pollutant under Title 129, Chapter 2, Section 008. Therefore, this facility has a 250 tpy PSD major source threshold. Because potential emissions of VOCs (or any other PSD pollutant) are not greater than 250 tpy, this facility is not considered an existing major source for PSD purposes.

Title 129, Chapter 20, Section 001 - Particulate Limitations, Process Weight Rates

Title 129, Chapter 20, Section 001, says that PM (filterable) emissions cannot be “in excess of the amounts in Table 20-2 during any one hour” (emphasis added). This means that the process weight rate limits, which are based on throughput of the emission units, vary as throughputs vary. The limits given in the tables in Conditions III.(C)(3)(a) and III.(E)(3)(a) are based on the maximum design throughput of the emission units. When the emission units operate at less than maximum design throughputs, the process weight rate limits are different because the limits are based on actual throughputs.

The process weight rate PM limit is calculation using the following formula:

$$E=4.10p^{0.67}$$

Where E= rate of emission in lb/hr

p= process weight rate in tons/hr

Emission Unit	Maximum capacity	Process Weight Rate Limit	PM Potential Emissions
Unit 351-1: Zinc cast machine	207 lb/hr = 0.1035 tons/hr	0.897 lb/hr	0.031 lb/hr
Unit 355-1: Gas metal arc welding - Welding Dept.	2.85 lb/hr = 0.0014 tons/hr	0.051 lb/hr	0.015 lb/hr
Unit 369-1: Gas metal arc welding - Jack Cell	0.95 lb/hr = 0.0005 tons/hr	0.024 lb/hr	0.005 lb/hr
Unit 358-1: Powder Paint – automatic	4.17 lb/hr = 0.0021 tons/hr	0.066 lb/hr	0.029 lb/hr
Unit 358-2: Powder Paint – hand touch-up	0.4 lb/hr = 0.0002 tons/hr	0.014 lb/hr	0.003 lb/hr

The burn-off oven [Condition III.(B)] is not subject to Title 129, Chapter 20, Section 001 and 002, because it is subject to Title 129, Chapter 22, Section 002 (incinerator requirements) and is stated in the 2002 Construction Permit. Per Title 129, Chapter 20, Section 008, Sections 001 and 002 of Chapter 20 shall apply unless a more stringent PM standard is specified within a construction permit issued pursuant to this Title.

Title 129, Chapter 20, Section 002 - Particulate Limitations for Combustion Equipment

Title 129, Chapter 20, Section 002 says that PM (filterable) emissions caused by combustion of fuel cannot be emitted from any stack or atmosphere in excess of the hourly rate set forth in Table 20-1. All the combustion units at this facility use natural gas. The heat input rating for the combustion units identified below are less than 10 MMBtu/hr (each). As such, the PM limitations for these units are 0.60 lb/MMBtu each. The combustion units have the following emission rates:

Emission Unit	Total Heat Input	Maximum allowable emission		Emission Rate
	(MMBtu/hr)	(lb/MMBtu)	(lb/hr)	(lb/hr)
Unit 351-2: Zinc die cast process heater	0.50	0.60	0.3	0.0037
Unit 357-2: Degreaser boiler	0.4	0.60	0.24	0.0030
Unit 358-3: Paint cure oven	0.7	0.60	0.42	0.0052
Unit 363-1: 3 Brazers exothermic atmosphere generators	0.36 (each)	0.60	0.22 (each)	0.0027 (each)
Unit 373-2: 48 Space heaters	7.265 (total)	0.60	4.575 (total)	0.054 (total)
Unit 373-3: HVAC units	9.4 (total)	0.60	5.64 (total)	0.070 (total)
Unit 385-4: Paint burn off oven	0.3	0.60	0.18	0.0022

Title 129, Chapter 20, Section 004 – Opacity Limitation

Title 129, Chapter 20, Section 004 applies to all emission units at Dutton-Lainson and states that opacity from any source cannot be equal or greater than 20%. The combustion units are unlikely to exceed the opacity limit because they combust natural gas. The paint spraying operations are unlikely to exceed the opacity limit because the booths use dry filters to control particulate matter. The other emission units are unlikely to exceed the opacity limit because their particulate matter emission rates are small.

Title 129, Chapter 22 – Incinerators; Emission Standards

The source paint burn off oven, emission unit 385-4, is considered an incinerator, and as such is subject to the requirements of Title 129, Chapter 22. The permit includes the PM emissions standard included in Title 129, Chapter 22, Section 002. The permit includes a condition requiring that the source post incinerator operating instructions and requiring that the source maintain certifications that each operator has read the operating instructions, understands them and intends to comply with them, as required by Title 129, Chapter 22, Section 005.

Title 129, Chapter 24 - Sulfur Compound Emissions

The permit includes a condition that limits SO_x emissions from fuel combustion to 2.5 lb/MMBtu per Title 129, Chapter 24, Section 001 for combustion emission units that existed prior to February 26, 1974. It is highly unlikely the source combustion units would ever exceed this limit, given the only fuel allowed is natural gas. The AP-42 emission factor for natural gas combustion from Table 1.4-2 is 0.6 lb/MMcf, or approximately 0.0006 lb/MMBtu. Therefore, no testing or monitoring is required for the SO_x limit.

Title 129, Chapter 28 - National Emission Standards for Hazardous Air Pollutants (NESHAP)

The source is considered a major source of HAPS since the PTE for a single HAP and total HAPs are above 10 and 25 tons per year, respectively. This facility is subject to the MACT standards summarized below.

Subpart A – General Provision:

This subpart, adopted by reference in Title 129, Chapter 28, Section 001.01, applies to the owner or operator of any stationary source that emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and is subject to any standard, limitation, prohibition, or federally enforceable requirement established pursuant to Part 63. This source is subject to this subpart because it is subject to one or more subparts contained in Part 63 and emits hazardous air pollutants listed in section 112(b) of the Act.

Subpart N – Chromium Electroplating & Anodizing:

This subpart, adopted by reference in Title 129, Chapter 28, Section 001.02, applies to each chromium electroplating or chromium anodizing tank at facilities performing hard chromium electroplating, decorative chromium electroplating, or chromium anodizing. This facility is not subject to Subpart N since the tank containing chromic acid does not have an electrical current [§63.340(c)]. Chromium is applied using passivation.

Subpart T – Halogenated Solvent Cleaning:

This subpart, adopted by reference in Title 129, Chapter 28, Section 001.05, applies to specified solvent cleaning machines using any solvent containing methylene chloride (CAS # 75092), perchloroethylene (CAS # 127184), trichloroethylene (CAS # 79016), 1,1,1-trichloroethane (CAS #71556), carbon tetrachloride (CAS # 56235), or chloroform (CAS #67663), or any combination of these halogenated HAP solvents, in total concentration greater than 5% by weight, at either major or area sources of HAPs. This source is a major source of HAPs since the batch vapor degreaser exceeds 10 tons/yr potential emissions of a single HAP. The source uses a batch vapor solvent cleaning machine with trichloroethylene (TCE) as the solvent, which makes it an affected facility under Subpart T.

The permit specifies that the facility is subject to NESHAP Subpart T. The degreaser is currently subject to the following:

Citation	Summary description of requirements
§63.463(a)(1)-(6)	Equipment and control device design and operational requirements.
§63.463(b)(2)(i) {Option 6}	The vapor cleaning machine shall be employed with a control combination of a freeboard refrigeration device, reduced room draft, and a freeboard ratio of 1.
§63.463(d)(1)-(12)	Work and operational practices requirements.
§63.463(e)(2)(i)-(ii)	Standards for control equipment in Option 6 of §63.463(b)(2)(i).
§63.463(e)(3)	Determining exceedance when the standards in §63.463(e)(2) are not met.
§63.463(e)(4)	Reporting requirement for exceedances.
§63.466(c)(1)-(3)	Monitoring of hoist speed.
§63.466(d)(1)	Monitoring of reduced room draft.

§63.467(a), (a)(1), (a)(2), (a)(5), (b), (b)(1)-(3)	Recordkeeping requirements
§63.468(f), (g), (h), (i); §63.471(e)	Reporting requirements. {Initial notifications have been submitted so their requirements are not listed here.}
Citation	Summary description of requirements
§63.471	Facility-wide limits (for all solvent cleaning machines at plant) for perchloroethylene, trichloroethylene, and methylene chloride used. Calculations for monthly and rolling 12-monthly emissions are shown. A log must be maintained, retained for 5 years, and annual solvent emission reports submitted.

The specifics of the equipment design, operational/monitoring requirements, and reporting/recordkeeping requirements are in the permit per the request of Dutton-Lainson. If the subpart is modified during the operating permit period and the facility is subject to the most current version of NESHAP Subpart T. Additionally, the subpart does have alternatives for some conditions, so the facility may change them in the future.

On May 3, 2007, EPA modified NESHAP Subpart T. The modification included adding the facility-wide limits in §63.471. The batch vapor degreaser is an existing unit, and it had a compliance date of May 3, 2010. By the compliance date, the facility needed to submit an initial notification identifying the type of machine, the control device(s), date of installation of degreaser, and estimated annual halogenated HAP solvent consumed. Dutton-Lainson submitted the initial notification on January 29, 2009.

Subpart DDDDD – Industrial, Commercial, Institutional Boilers and Process Heaters at Major Sources. This subpart, adopted by reference in Title 129, Chapter 28, Section 001.70, applies to major sources of HAPs with boilers and process heaters. The zinc die cast process heater (Unit #351-2) and the degreaser boiler (Unit #357-2) are subject to this subpart. These units are existing units, and therefore have to comply with this subpart no later than January 31, 2016 {per §63.7495(b)}. This units are in the subcategory of “Unit designed to burn gas 1 fuels subcategory” since they only combust natural gas.

Units #373-2 and #373-3 are space heaters/HVAC units which are not boilers or process heaters, therefore they are exempt from this subpart. Unit 358-3 cure oven’s burner is not considered a process heater because the heat is applied directly to items being cured (fuel combustion emissions have direct contact with items being cured). Boilers/process heaters are defined as follows in NESHAP Subpart DDDDD:

Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. A device combusting solid waste, as defined in §241.3 of this chapter {40 CFR}, is not a boiler unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Waste heat boilers are excluded from this definition.

Process heater means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material (e.g., glycol or a mixture of glycol and water) for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. A device combusting solid waste, as defined in §241.3 of this chapter {40 CFR}, is not a process heater unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Process heaters do not include units used for

comfort heat or space heat, food preparation for on-site consumption, or autoclaves. Waste heat process heaters are excluded from this definition.

The Units designed to burn gas 1 fuels subcategory is required to conduct periodic tune-ups of each unit. Since the zinc die cast process heater (Unit #351-2) and the degreaser boiler (Unit #357-2) are less than 5 MMBtu/hr units, then the tune-ups must be conducted at least once per every 5 years [§63.7500(e)].

Subpart MMMM – Miscellaneous Metal Parts and Products.

This subpart, adopted by reference in Title 129, Chapter 28, Section 001.81, applies to surface coating of miscellaneous metal parts and products located at a major HAP source, which uses 250 gallons/yr or more of coatings that contain organic HAP. The surface coating includes associated activities, such as surface preparation, cleaning, mixing, and storage. The potential surface coating operations include emission units #358-1, 358-2, and 358-5 (paint department excluding cure oven and burn-off oven). The majority of the painting is conducted in unit #358-1 using powder paints. Powder paint does not contain organic HAPs. The facility uses solvents in the touch-up booth (#358-2) that may contain organic HAPs. The other painting operations (#358-5) are typically water-based coatings. The facility uses ethylene glycol butyl ether (EGBE) as a thinner in the painting operations. The EGBE (CAS # 111762) was previously a HAP, but in the November 29, 2004 Federal Register (69FR69320) EPA delisted EGBE as an HAP in the Clean Air Act. NDEQ has removed EGBE as an HAP in Title 129.

The facility will need to keep records to demonstrate that the painting operations do not exceed 250 gallons/yr coatings that contain organic HAPs. When determining applicability with NESHAP Subpart MMMM, all of the painting area is considered together – not by each unit. If the facility adds new painting operations in the future (even those that are below construction permit thresholds), the new painting operations would need to be considered in determining applicability. Per the 2012 emission inventory, the facility used 58 gallons/yr of solvent in the touch-up booth that contained organic HAPs (xylenes, toluene), and the other painting operations didn't have chemicals with organic HAPs. If the facility exceeds the 250 gal/yr or more threshold of organic HAP containing coatings, then the facility must comply with all applicable requirements of Subpart MMMM and make the appropriate notifications to the NDEQ.

The facility worked with the NDEQ and EPA to determine that the facility's plating operation does not constitute a surface coating operation containing HAPs. This determination was due to the fact that the only tank in the zinc electroplating process that contains an HAP is the chrome conversion tank and that operation was deemed exempt because the conversion coating consists of only a dilute chromatic acid-water solution. From the Subpart MMMM definition of coating found at §63.3981, materials consisting of only acids are not considered coatings for the purposes of Subpart MMMM. EPA headquarters sent an email on October 31, 2006 to EPA Region 7 (NDEQ & Dutton-Lainson have a copy) with determination that the plating operations are exempt from NESHAP Subpart MMMM.

Title 129, Chapter 31 – Compliance Assurance Monitoring

The facility is not subject to Compliance Assurance Monitoring. The batch vapor degreaser uses passive control measures to control emissions. The burn-off oven has controls that are integral to the process of the unit. The other equipment doesn't have emission controls. None of the emission units have control devices as defined in 40 CFR 64.1.

Title 129, Chapter 34 – Emission Sources; Testing and Monitoring

Testing is not required for the degreaser (#357-1) because it is regulated under the NESHAP Subpart T. NESHAP Subpart T includes work and operational requirements and monitoring requirements that ensures the control equipment is working properly. Testing is not required for the paint burn off oven (#385-4) because it is not expected to exceed the emission limit established for incinerators. Testing is

not required for the painting operation because the booths use dry filters to control PM, and the automatic powder paint booth recycles the overspray. Testing is not required for fuel combustion units, because the fuel combusted is natural gas, and the emissions are not expected to exceed the limits. Testing for PM is not required for the zinc die cast machine (#351-1) and gas metal arc welding (#355-1 and 369-1) because the regular maintenance and proper operation of equipment will keep emissions well below the PM limits. Testing for SO_x for units subject to Title 129, Chapter 24 is not required, because the combustion of only natural gas fuel will demonstrate compliance.

Prevention of Accidental Releases of Title III, Section 112(r)

Title 129, Chapter 8, Section 011, states that an operating permit must contain conditions pertaining to the Prevention of Accidental Releases program [Section 112(r) – 40 CFR Part 68] when a source is subject to this program (Title 129, Chapter 8, Section 015). Dutton-Lainson is not subject to this section of the Federal Clean Air Act because the source does not produce, process, handle, or store threshold quantities of substances regulated under Section 112(r). Therefore, the operating permit does not contain conditions for the Prevention of Accidental Releases program (§68.10 and §68.115).

Permit Conditions II and III are discussed as follows:

Condition II includes Specific Conditions that are standard for all permitted sources.

- II.(A) This condition contains general recordkeeping requirements that apply to all permitted emission units, including a date for when records must be completed, the length of time records must be maintained, and the identification of specific types of records that must be maintained by the permittee. Records must be maintained to ensure compliance with all applicable requirements. Specific recordkeeping requirements for permitted emission units can be found in the respective sections covering the units (Title 129, Chapter 8, Section 004.02B).
- II.(B) This condition specifies general submittal and reporting requirements. The reports required by this condition include semi-annual deviation reports, reports of all deviations from permit requirements, the annual emissions inventory report, a submission of emissions fees, annual certification of compliance, and excess emissions reports. Unit-specific reporting requirements are provided in Condition III of the permit (Title 129, Chapter 1, Section 135; Chapter 7, Section 008; and Chapter 8, Section 012.01).
- II.(C)(1) This condition allows the permittee to make changes in the configuration of equipment at the source, defined as “Section 502(b)(10) changes (Title 129, Chapter 1, Section 139), without a permit revision, provided that the change is not a modification under the NSPS or NESHAP programs, the change does not require a construction permit, and the change does not result in emissions allowable under the permit being exceeded. If these types of changes are made at the source, a notification must be sent to the NDEQ in accordance with Condition II.(C)(1). A permit shield does not apply to Section 502(b)(10) changes [Title 129, Chapter 15, Section 007.01].
- II.(C)(2) This condition allows the permittee to make changes in equipment configuration at the source that are not defined as Section 502(b)(10) changes. These types of changes are commonly referred to as “off-permit” changes. Off-permit changes can be made without an operating permit revision if the change is not a modification under the NSPS or NESHAP programs and the change does not require a construction permit. All off-permit changes must meet all applicable requirements and cannot violate any existing permit terms or conditions. The source is required to notify both the NDEQ and the USEPA of off-permit changes. The notification must be made in accordance with Condition II.(C)(2). A permit shield does not apply to off-permit changes (Title 129, Chapter 15, Section 007.02).

For purposes of Condition II.(C), notification is not required for changes that are deemed to be routine maintenance, repair, or replacement (except when defined as reconstruction), unless the change results in an exceedance in emissions allowable under this permit; the change violates the terms of this permit as related to monitoring, recordkeeping, testing, and compliance certification; or the change violates an applicable requirement.

- II.(D) This condition establishes requirements related to performance testing, should it be required. For all testing, the permittee is required to provide the NDEQ at least thirty (30) days written (i.e. hard copy, not electronic or verbal) notice prior to testing, unless the NDEQ gives approval for a notice of less than 30 days. If testing is pursuant to a requirement in federal rule, the notice provisions of the underlying requirement apply. The notification should include the emissions testing protocol. This is to ensure that the NDEQ has the opportunity to witness the emissions testing and/or review the testing plan proposed. The owner or operator must also submit the final test results within sixty (60) days after the test has occurred. Note that testing must take place when the source is operating at full capacity (Title 129, Chapter 8, Sections 004.01B and 012.01 and Chapter 34, Sections 002 and 003).
- II.(E) A permit shield was not requested and is therefore not granted (Title 129, Chapter 8, Section 014).
- II.(F) This condition requires all emission units, control equipment, and monitoring equipment to be properly installed, operated, and maintained (Title 129, Chapter 8, Section 004.01C; Chapter 11, Section 001; Chapter 34, Section 006; and Chapter 35, Sections 006.02 and 006.05).
- II.(G) This condition requires the permittee to comply, in a timely matter, with requirements that become effective during the permit term (Title 129, Chapter 7, Section 006.02H, and Chapter 8, Section 012.03).
- II.(H) This condition states that if there are any discrepancies between applicable NSPS or NESHAP standards and the terms and conditions of this permit, the NSPS or NESHAP standards take precedence unless they are less stringent (Title 129, Chapter 8, Section 013).
- II.(I) This condition applies to emission units that have conducted a performance tests. These units must keep records of daily throughput/production rate to ensure that the throughput/production rates are consistent with the rates that occurred during the last performance test.

Condition III includes conditions that are specific to the emissions units and emission points listed in each respective condition.

III.(A) Batch Vapor Degreaser

- (A)(1) This condition identifies the batch vapor degreaser (Unit #357-1) at this facility. The degreaser description includes details to determine applicability with NESHAP Subpart T.
- (A)(2) The degreaser is subject to NESHAP Subpart T. The degreaser is subject to NESHAP Subpart T because it uses trichloroethylene (TCE) in total concentration greater than 5% by weight as specified in Subpart T.
- (A)(3) The requirements for the batch vapor degreaser are to comply with NESHAP Subpart T, including a 14,100 kg per weight 12-month rolling average of trichloroethylene, as well as limits for methylene chloride and multiple solvents, per 40 CFR 63.471. The facility-wide emission limits and the equation to demonstrate compliance with the facility-wide emission limits are located in §63.471(b)(2) and have been identified in the permit.

- (A)(4) Operational and monitoring requirements are specified in NESHAP Subpart T. The batch vapor cleaning machines standards and design requirements are from §63.463(b)(2)(i), (a)(1)(ii), (a)(2), (a)(3), (a)(5) through (a)(6). (A freeboard ratio of 0.75 or greater is required by §63.463(a)(2), and compliance with §63.463(b)(2)(i) shall be demonstrated through compliance with the above limit of 1.) The operating requirements for the batch vapor cleaning machine are from §63.463(d)(1)(ii), (d)(2) through (d)(12). The monitoring requirements for the control equipment are from §63.463(e)(2)-(4); with the thermocouple/thermometer identified in §63.466(a)(1), the hoist speed monitoring requirements from §63.466(c), the reduce room draft monitoring requirements from §63.466(d). A log of the solvent additions and deletions is required per §63.471(b)(1). The monthly demonstration of the facility-wide emissions limits are from §63.471(c). An exceedance of the facility-wide emissions limit is specified in §63.471(d).
- (A)(5) Recordkeeping, and reporting requirements are specified in NESHAP Subpart T. The batch vapor cleaning machine recordkeeping requirements are from §63.467(a)(1),(2) and (5), and §63.467(b)(1)-(3). The batch vapor cleaning machine reporting requirements are from §63.468(f), (h), and (i). NDEQ has changed the date the annual report (§63.468(f) – requiring training certification and solvent consumption) of February 1 in the NESHAP to March 31 to coordinate with the submittal of other reports. NDEQ has the authority to change this date per NESHAP Subpart A - §63.10(a)(5) – allowed to change date of submittal but no change to frequency of report. NDEQ has had the date changed to March 31 in the 2003 and 2008 operating permits for this source. The records that document the compliance demonstration for the emission limits in Condition III.(A)(3)(a) {solvent usage/waste/emissions} are from §63.471(e). The annual solvent emission report requirements are from §63.471(h).

III.(B) Paint Burn Off Oven

- (B)(1) This Condition identifies Emission Unit 385-4, the paint burn off oven, with a 0.3 MMBtu/hr natural gas burner, equipped with an afterburner to control emissions.
- (B)(2) The paint burn off oven is not subject to NSPS or NESHAP requirements.
- (B)(3) The paint burn off oven is considered an incinerator and as such is subject to the requirements of Title 129, Chapter 22. The conditions for the paint burn off oven were taken from the construction permit issued December 13, 2002 for this unit. The PM emission limit is from Title 129, Chapter 22, Section 002, and the opacity limitation is from Title 129, Chapter 20, Section 004. If the burn-off oven is properly maintained and operated, it isn't expected that the PM or the opacity will exceed the emission limits; therefore, PM testing is not required at this time (but NDEQ may request the testing in the future) and Method 9 testing is not required to demonstrate compliance with opacity limit.
- (B)(4) The proper maintenance and operation of the burn-off oven is required to ensure that the emissions are minimized. The burn-off oven can only burn the coating from metal parts; otherwise it may become subject to a NSPS subpart for incinerators (subpart depends on what is burned).
- (B)(5) Records must be kept of the material burn, and fuel combusted to demonstrate compliance with Conditions III.(B)(3) and (B)(4).

III.(C) Painting Operations

- (C)(1) This condition identifies the painting operations at this facility. This condition applies to the powder paint, lacquer spray painting, and dip painting – water based. The painting operations were grouped because: (1) the hand touch-up powder paint and the lacquer spray painting are

conducted in the same spray booth; and (2) the amount of liquid paint and solvents used for lacquer spray painting and dip painting to be accounted for to determine applicability to NESHAP Subpart MMMM. The painting operations will become subject to NESHAP Subpart MMMM if the liquid surface coating chemicals (paint and solvents) that contain organic HAP exceed organic HAP. Title 129, Chapter 27, Section 002 (State HAP-BACT) is not required, because the facility will reach the NESHAP Subpart MMMM threshold (250 gallons/yr of coatings that contain organic HAP) before the State HAP-BACT threshold is reached.

- (C)(2) The painting operations are not subject to an NSPS or NESHAP subpart.
- (C)(3) The painting operations are subject to PM limits in Title 129, Chapter 20, Section 001 (process weight rate limits) for the spraying operations and Title 129, Chapter 20, Section 004 (opacity) for all painting operations. Dutton-Lainson can demonstrate compliance with the PM and Opacity limits by complying with Condition III.(C)(4).
- (C)(4) The paint spraying booths are required to have a dry filter system (Unit #358-1) or dry filters (Unit #358-2) operated and maintained properly. The dry filter system and dry filters control particulate emissions. If they are operated and maintained properly, then they will demonstrate compliance with Title 129 Chapter 20 emission limits.
- (C)(5) The condition requires recordkeeping demonstrating that Dutton-Lainson is not subject to NESHAP Subpart MMMM. If additional painting operations are added to Dutton-Lainson in the future, then the HAP emissions need to be included in the NESHAP Subpart MMMM recordkeeping. Also, this condition requires recordkeeping demonstrating continuous compliance of Condition III.(C)(4).

III.(D) Process Boiler/Heaters

- (D)(1) This condition identifies the zinc die cast process heater (# 351-2) and the degreaser boiler (#357-2) as process boiler/heaters that are subject to NESHAP Subpart DDDDD.
- (D)(2) This condition specifies that the process heater and boiler are subject to NESHAP Subpart DDDDD. This source (entire plant) is a major source for HAPs because of the batch vapor degreaser. This subpart applies to all boilers and process heaters located at major sources of HAPs, unless specifically exempted per §63.7491. All of these units are existing units since they were constructed prior to June 4, 2010 and have not been reconstructed since June 4, 2010. Additionally, all of the units are classified as “Unit designed to burn gas 1 subcategory” since they burn natural gas only. These units are not subject to NSPS Subpart Dc (small industrial/commercial/institutional steam generating units), since each unit is less than 10 MMBtu/hr heat capacity. The initial compliance date for these units is January 31, 2016.
- (D)(3) This condition identifies the emission limits that these units are subject to. These units are subject to Title 129, Chapter 20, Section 002 (PM limit for fuel combustion sources) and Section 004 (opacity). Unit #351-2 is also subject to Title 129, Chapter 24, because it was installed prior to February 26, 1974. The units are expected to comply with these requirements because they are natural gas fired.
- (D)(4) These units are subject to the operating and monitoring requirements of NESHAP Subpart DDDDD. These requirements include conducting an one-time energy assessment per §63.7500(a) {referencing Table 3 and the energy assessment definition in §63.7575}; operating and maintaining the boiler/process heater in a manner consistent with safety and good air pollution control practices per §63.7500(b); a tune-up of the boiler/process heater at least once per every 5 years as specified in §63.7500(e) and §63.7515(d); and must apply at all times the boiler/process

heater is operational as specified in §63.7500(f) and §63.7505(a). The tune-up requirements are identified in §63.7540(a)(12), which references §63.7540(a)(10) {note: §63.7540(a)(10)(vi)(C) is not required because the process heater and boiler only combust one fuel}. Delay of the tune-up due to unit not operating is specified in §63.7540(a)(13). The fuel combusted is limited to natural gas, which means that NESHAP Subpart DDDDD requirements for other fuels are not required for Units #351-2 and #357-2.

- (D)(5) These units are subject to the recordkeeping and reporting requirements of NESHAP Subpart DDDDD. The signed certification of Notification of Compliance Status must be completed for the tune-ups for each unit and the energy assessment, in accordance to §63.7530(d) and (e). The Notification of Compliance Status for initial compliance demonstration is required by §63.7530(f), referencing §63.7545(e) {only (e)(1), (e)(6), (e)(7), (e)(8)(i) and (e)(8)(ii) are applicable to this facility}. If the facility makes a physical change on these units, then a notification will need to be submitted, in accordance with §63.7545(h). {The requirements in §63.7545(h) pertaining to fuel switches were removed, because Condition III.(D)(4)(b) limits fuel to natural gas.} The contents of the compliance report is required per §63.7550(a), which references Table 9 {only items 1.a., 1.b., and 1.c. are applicable} of NESHAP Subpart DDDDD, which references §63.7550(c) and (d) {only (c)(5)(i)-(iv), (c)(5)(i)(xiv), (d)(1), and (d)(2) are applicable}. Since these units only require a tune-up once every 5 years, they are required to submit the compliance report electronically to EPA at least once every 5-year period {per §63.7550(h)(3) and (b)}. The records for NESHAP Subpart DDDDD in accordance to §63.7555 that are applicable to this facility are listed in the permit {only §63.7555(a)(1), (a)(2), and (j) are applicable}.

III.(E). Zinc Process Equipment

- (E)(1) This condition identifies the zinc process equipment: zinc die cast machine and zinc electroplating lines.
- (E)(2) The zinc process equipment is not subject to NSPS or NESHAP requirements. The zinc electroplating lines are exempt from NESHAP Subpart N, because the process uses passivation, not electrical current, to electroplate chrome.
- (E)(3) The zinc die cast machine is subject to Title 129, Chapter 20, Section 001 (process weight rate limits). The zinc electroplating lines are not subject to Title 129, Chapter 20, Section 001, because they do not emit PM. Both the zinc die cast machine and the zinc electroplating lines are subject to Title 129, Chapter 20, Section 004 (opacity).
- (E)(4) and (E)(5) The zinc process equipment are subject to the operational and monitoring requirements and recordkeeping and reporting requirements specified in Condition II.

III.(F) Insignificant Activities

- (F)(1) This condition applies to the insignificant activities at this facility.

Insignificant Activity ID	Unit Description	Insignificance Criteria
Unit 355-1	Gas Metal Arc Welding in the Welding Department, controlled by indoor filter air cleaners above each welding area.	Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAPs that exceed the reporting level(s) in Title 129, Appendix II or Appendix III.
358-3	0.7 MMBtu/hr natural gas process heater on the powder paint cure oven, installed in 1961	Stationary external combustion units not subject to a NSPS or NESHAP using natural gas and a heat input capacity rated below 10 MMBTU/hr each.
Unit 363-1	Three (3) 0.36 MMBtu/hr natural gas exothermic atmosphere generators totaling 1.1 MMBtu/hr used to produce an oxygen-free environment within the electrically heated Brazer oven, installed in 1972	Stationary external combustion units not subject to a NSPS or NESHAP using natural gas and a heat input capacity rated below 10 MMBTU/hr each.
Unit 369-1	Gas Metal Arc Welding in the Jack Cell, controlled by indoor filter air cleaners above each welding area.	Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAPs that exceed the reporting level(s) in Title 129, Appendix II or Appendix III.
Unit 373-2	48 natural gas fired space heaters throughout the factory totaling 7.265 MMBtu/hr heat input	Stationary external combustion units not subject to a NSPS or NESHAP using natural gas and a heat input capacity rated below 10 MMBTU/hr each
Unit 373-3	17 natural gas fired rooftop HVACs totaling 9.4 MMBtu/hr heat input	Stationary external combustion units not subject to a NSPS or NESHAP using natural gas and a heat input capacity rated below 10 MMBTU/hr each.
Unit 373-4	500 gal propane storage tank used for forklift refueling – annual use 3000 gal/yr average of LPG (Propane)	Fuel storage and distribution equipment, including storage vessels (tanks), with aggregate annual throughput of less than 1 million gallons for the entire source.

Insignificant Activity ID	Unit Description	Insignificance Criteria
--	Maintenance of processing equipment, machinery, and/or control devices, buildings, grounds or facilities to maintain appearance or condition.	Maintenance activities are insignificant activities. The paint booth associated with maintenance activities cannot be used to paint metal parts produced at the facility for sale.

(F)(2) These units are subject to Title 129, Chapters 20 and 24, as appropriate. The fuel combustion units that are subject to Chapter 24 (installed prior to February 26, 1974) will meet the SO_x limitation, because they combust natural gas.

(F)(3) Insignificant Activities are exempt from operational and monitoring requirements.

(F)(4) If there are additions or changes to the insignificant activities list, Dutton-Lainson is required to submit a contemporaneous written notification.

STATUTORY OR REGULATORY PROVISIONS ON WHICH PERMIT REQUIREMENTS ARE BASED:

Applicable regulations: Title 129 - Nebraska Air Quality Regulations as amended May 13, 2014.

PROCEDURES FOR FINAL DETERMINATION WITH RESPECT TO THE PROPOSED OPERATING PERMIT:

The public notice, as required under NAQR Chapter 14, shall be published on {**day, date and name of newspaper-Admin Asst will fill this in**} newspaper. Persons or groups shall have 30 days from that issuance of public notice {**date-Admin Asst will fill this in**} to provide the NDEQ with any written comments concerning the proposed permit action and/or to request a public hearing, in accordance with NAQR Chapter 14. If a public hearing is granted by the Director, there will be a notice of that meeting published at least 30 days prior to the hearing. Persons requiring further information, having comments, or requesting a public hearing may, either electronically or through hardcopy letter, contact:

David L. Christensen – Operating Permits Unit Supervisor
Air Quality Division
Nebraska Department of Environmental Quality
PO Box 98922
Lincoln, Nebraska 68509-8922
Email: [[HYPERLINK "mailto:NDEQ.AirQuality@nebraska.gov"](mailto:NDEQ.AirQuality@nebraska.gov)]

If no public hearing is requested, the permit may be granted at the close of the 30-day comment period. If a public hearing is requested, the Director of the NDEQ may choose to extend the date on which the permit is to be granted until after that public hearing has been held. During the 30-day comment period, persons requiring further information should, either electronically or through hardcopy letter contact:

Stephenie Moyer
Air Quality Division-Permitting Section
Nebraska Department of Environmental Quality
PO Box 98922
Lincoln, Nebraska 68509-8922
Email: [[HYPERLINK "mailto:NDEQ.AirQuality@nebraska.gov"](mailto:NDEQ.AirQuality@nebraska.gov)]

Telephone inquiries may be made at: (402) 471-2186

TTD users should call (800) 833-7352 and ask the relay operator to call the Department at (402) 471-2186.

Within 60 days after the US Environmental Protection Agency Administrator review, persons may petition the Administrator to object to the issuance of the proposed permit. Any such petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period, unless the petitioner demonstrates that it was impracticable to raise such objection within such period. For specific dates for which the 60-day petition period is open, contact Stephenie Moyer at (402) 471-2186. Petitions should be mailed to:

Karl Brooks, Regional Administrator
US EPA Region VII
Attn: Air Permitting & Compliance Branch
11201 Renner Boulevard
Lenexa, KS 66219

Compliance with this permit shall not be a defense to any enforcement action for violation of an ambient air quality standard.